What is claimed is:

1. An article comprising a machine-readable medium embodying information indicative of instructions that when performed by one or more machines result in operations comprising:

determining a speech-presence-uncertainty metric based on input representing audio information; and

performing smoothing during noise suppression of the input information based on the determined speech-presence-uncertainty metric to produce output representing audio information with enhanced speech and reduced musical noise.

2. The article of claim 1, wherein determining the speech-presence-uncertainty metric comprises:

determining a speech presence likelihood based on the input information and filter coefficients from a noise suppressor system; and

setting the speech-presence-uncertainty metric based on the determined speech presence likelihood.

3. The article of claim 2, wherein performing smoothing during noise suppression comprises:

low-pass filtering the filter coefficients from the noise suppressor system based on the speech-presence-uncertainty metric; and

suppressing noise in the input information based on the filtered filter coefficients.

4. The article of claim 3, wherein setting the speech-presence-uncertainty metric comprises:

determining a smoothed speech presence likelihood based on the determined speech presence likelihood and a past smoothed speech presence likelihood; and

setting the speech-presence-uncertainty metric based on the determined smoothed speech presence likelihood.

5. The article of claim 3, wherein the speech-presence-uncertainty metric comprises a Boolean value, low-pass filtering comprises selectively low-pass filtering the filter coefficients based on the Boolean value, and suppressing the noise comprises suppressing the noise based on the selectively filtered filter coefficients.

6. The article of claim 3, wherein determining the speech presence likelihood comprises determining the speech presence likelihood based on transformed information, suppressing the noise comprises suppressing the noise based on the transformed information, and the operations further comprises:

performing a time to frequency transform on the input information; and

generating the output information by performing an inverse time to frequency transform on the noise suppressed information.

7. The article of claim 3, wherein the speech-presence-uncertainty metric comprises a continuous value and low-pass filtering the filter coefficients comprises variably low-pass filtering based on the speech-presence-uncertainty metric to effect a varying amount of smoothing.

8. The article of claim 3, wherein the filter coefficients comprise filter coefficients formulated as a component-wise multiplication of a noisy speech spectrum in a frequency domain.

9. The article of claim 1, wherein determining the speech-presence-uncertainty metric comprises determining the speech-presence-uncertainty metric based on a full band minimum mean square error estimator weighting of the audio input.

10. A method comprising:

determining a speech-presence-uncertainty metric based on input representing audio information; and

performing smoothing during noise suppression of the input information based on the determined speech-presence-uncertainty metric to produce output representing audio information with enhanced speech and reduced musical noise.

11. The method of claim 10, wherein determining the speech-presence-uncertainty metric comprises:

determining a speech presence likelihood based on the input information and filter coefficients from a noise suppressor system;

determining a smoothed speech presence likelihood based on the determined speech presence likelihood and a past smoothed speech presence likelihood; and

setting the speech-presence-uncertainty metric based on the determined smoothed speech presence likelihood.

12. The method of claim 11, wherein performing smoothing during noise suppression comprises:

low-pass filtering the filter coefficients from the noise suppressor system based on the speech-presence-uncertainty metric; and

suppressing noise in the input information based on the filtered filter coefficients.

13. The method of claim 12, wherein determining the speech presence likelihood comprises determining the speech presence likelihood based on transformed information, suppressing the noise comprises suppressing the noise based on the transformed information, and the method further comprises:

performing a time to frequency transform on the input information; and

generating the output information by performing an inverse time to frequency transform on the noise suppressed information.

14. The method of claim 13, wherein the filter coefficients comprise filter coefficients formulated as a component-wise multiplication of a noisy speech spectrum in a frequency domain.

15. The method of claim 10, wherein determining the speech-presence-uncertainty metric comprises determining the speech-presence-uncertainty metric based on a full band minimum mean square error estimator weighting of the audio input.

16. A system comprising:

a noise suppressor system that receives input representing audio information and generates filter coefficients; and

a back-end smoothing system that receives the input information and the filter coefficients, determines a speech-presence-uncertainty metric based on the input information and the filter coefficients, and performs smoothing during noise suppression of the input information based on the determined speech-presence-uncertainty metric to produce output representing audio information with enhanced speech and reduced musical noise.

17. The system of claim 16, wherein the noise suppressor system comprises a minimum mean square error estimator, and the filter coefficients comprise filter coefficients formulated as a component-wise multiplication of a noisy speech spectrum in a frequency domain.

18. The system of claim 17, wherein the speech-presence-uncertainty metric is based on a full band minimum mean square error estimator weighting.

19. The system of claim 18, further comprising:

a communication interface;

an input-output system; and

a processing system coupled with the communication interface and the input-output system.

20. The system of claim 19, wherein the noise suppressor system and the back-end smoothing system are integrated with the processing system.

21. The system of claim 19, wherein the noise suppressor system and the back-end smoothing system are integrated with the input-output system.

22. The system of claim 19, wherein the input information is received from the input-output system.

23. An apparatus comprising:

speech presence uncertainty assessment circuitry coupled to receive input representing audio information and noise reduction filter coefficients, wherein the speech presence uncertainty assessment circuitry determines a speech-presence-uncertainty metric based on the input audio information and the noise reduction filter coefficients; and

smoothing circuitry comprising a filter and a multiplier unit, the filter coupled to receive the noise reduction filter coefficients, and the multiplier unit coupled to receive the input audio information and output smoothed filter coefficients from the filter.

24. The apparatus of claim 23, wherein the speech-presence-uncertainty metric is based on a full band minimum mean square error estimator weighting.

25. The apparatus of claim 24, wherein the noise reduction filter coefficients comprise filter coefficients formulated as a component-wise multiplication of a noisy speech spectrum in a frequency domain.

26. The apparatus of claim 25, further comprising a time to frequency unit coupled to receive speech data and transform the speech data into the input information, and a frequency to time unit coupled with the multiplier unit to transform the multiplier unit's output to generate enhanced speech data output with reduced musical noise.

27. The apparatus of claim 26, wherein the filter comprises a low-pass filter.

28. The apparatus of claim 27, wherein the low-pass filter comprises an FFT/IFFT filter.

29. A system comprising:

means for suppressing noise in input representing audio information based on filter coefficients; and

speech-presence-uncertainty-assessment means for driving smoothing of the filter coefficients used by the means for suppressing noise to reduce musical noise and enhance speech.

30. The system of claim 29, further comprising means for smoothing the filter coefficients.

31. The system of claim 30, wherein the means for suppressing noise comprises a minimum mean square error estimator.